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A COMPARATIVE STUDY OF TWO FIRST GRADE LANGUAGE ARTS PROGRAMS.

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READING INSTRUCTION, *FIRST GRADE, *LISTENING HABITS, *SPEECH HABITS, *WORD RECOGNITION, WRITING EXERCISES, STUDENT ATTITUDES, INSERVICE TEACHER EDUCATION, EDUCATIONAL EXPERIENCES, TRADITIONAL SCHOOLS, CALIFORNIA, GILMORE ORAL READING TEST, DETROIT WORD RECOGNITION TEST, PINTNER-CUNNINGHAM PRIMARY INTELLIGENCE, SAN DIEGO COUNTY.

THIS STUDY WAS CONDUCTED TO DETERMINE THE RELATIVE EFFECTIVENESS OF THE EXPERIENCE APPROACH TO THE TEACHING OF THE LANGUAGE ARTS AS COMPARED WITH THE TRADITIONAL METHOD. TO ACCOMPLISH THIS, FOUR AREAS OF LANGUAGE ARTS WERE SEPARATELY MEASURED--READING, WRITING, LISTENING, AND SPEAKING. IN ADDITION, AN INDEX OF DEVELOPMENT IN READING INTEREST WAS TAKEN AND PUPIL ATTITUDE TOWARD READING DETERMINED. THE EXPERIENCE APPROACH USED THE LANGUAGE AND THINKING OF INDIVIDUAL CHILDREN AS THE BASIS FOR SKILL DEVELOPMENT. WITH REPEATED OPPORTUNITIES FOR SHARING IDEAS, ILLUSTRATING STORIES, AND WRITING STORIES WITH TEACHER HELP, CHILDREN BEGAN TO DEVELOP WRITING VOCABULARIES AND WERE ABLE TO WRITE THEIR OWN STORIES INDEPENDENTLY. THE TRADITIONAL METHOD APPEARED MORE EFFECTIVE FOR DEVELOPING THE SKILL OF DERIVING MEANING FROM THE WRITTEN PARAGRAPH FOR MALES OF ALL SOCIO-ECONOMIC LEVELS AND MIDDLE CLASS FEMALES, FOR DEVELOPING THE LISTENING ABILITY OF LOWER CLASS FEMALES, AND FOR DEVELOPING SPEAKING COMPETENCE OF BOTH MALES AND FEMALES IN ALL THREE SOCIO-ECONOMIC LEVELS. THE EXPERIENCE APPROACH DID INCREASE INTEREST IN READING IN LOWER CLASS MALES. THIS METHOD ALSO FAVORABLY AFFECTED MALES AND FEMALES IN WRITING AS THESE SUBGROUPS EXCELLED IN THE TOTAL NUMBER OF WORDS WRITTEN. (JL)

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Cooperative Research Project 2576

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Department of Education, San Diego County

San Diego, California

in cooperation with the

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CONTENTS

ACKNOWLEDGMENTS iii

PARTICIPANTS iv

CHAPTER

I. THE PROBLEM AND OBJECTIVES OF THE STUDY 1

The Problem 1
The Objectives. 2

II. SELECTED RELATED RESEARCH 4

III. PROCEDURES 7

Treatment Differentiation 7
Experience Approach 7
Traditional Method 13
Instructional Materials 19
Time Schedule 20
Population 21
Teacher Selection 21
Pupil Population 21
Community Characteristics 23
In-Service Education 28
Instrumentation 28

IV. ANALYSIS OF DATA 30

The Statistical Model 30
Tests of Poolability. 31
Principal Findings 31
Comparisons 31
Effect of Intellectual Differences. 32
Differential Mortality 34

V. SUMMARY AND CONCLUSIONS. 35

Summary 35
Conclusions. 35
Discussion 36
Tabular Presentation of Results 37

APPENDIX A—MEASURES OF PROFICIENCY

Measures of Speaking Proficiency 48
Measures of Writing Proficiency 49
Measure of Listening Proficiency 50

APPENDIX B—INSTRUMENTS USED IN THE STUDY

Rules Followed for Classification of Words and Sentences 52
Teacher Inventory of Approaches to the Teaching of Reading 53
An Inventory of Reading Attitude 57
Measurement of Socio-Economic Class 59
Phonetically Regular Words Oral Reading Test 61
Gates Word Pronunciation Test 62
Karlsen Phonemic Word Test 63

BIBLIOGRAPHY 65

LIST OF FIGURES AND TABLES

FIGURE

I. Teacher Characteristics 22

II. Community Characteristics 24

III. Control Variable Comparison of the Experience Approach and the Traditional Method Group 26

IV. Characteristics of Participating Schools 27

V. Significant Differences in the Effect of Instructional Modes 33

TABLE

1 Gilmore, Fry, Gates, Karlsen Tests 37

2 Speaking 38

3 Writing - Males 39

4 Writing - Females 40

5 Lower Socio-Economic Class - Males 41

6 Middle Socio-Economic Class - Males 42

7 Upper Socio-Economic Class - Males 43

8 Lower Socio-Economic Class - Females 44

9 Middle Socio-Economic Class - Females 45

10 Upper Socio-Economic Class - Females 46

CHAPTER I

THE PROBLEM AND OBJECTIVES OF THE STUDY

THE PROBLEM

The task of teaching children to read has been a primary concern to educators and parents for many years. The demands imposed by the increasing technological advances of our society require that we explore various means of more effectively and efficiently teaching reading.

For several years teachers and administrators in San Diego County have been vitally concerned with the entire area of the Language Arts. In 1957 several teachers working with staff members of the Department of Education, San Diego County, began to develop what they felt might be an improved way of teaching the language arts in the primary grades. This development, while slow at first, through the years gradually involved more and more teachers and administrators. The approach which finally evolved was a synthesis of methods and ideas developed by many people in a variety of locations over a period of almost two decades.

At first this approach was called the "creative writing approach to the teaching of reading." The individuals involved in the developmental work became convinced that they were moving in the right direction because of evidence obtained in observing students in the classroom. Children were introduced to writing before they learned to read, utilizing their own productions as their reading material. The amount and the quality of written production was considered comparable to that of students being instructed by other methods. The experimenters also felt that this approach freed children from the lock-step procedures of the adopted graded basal reading series, with its tightly controlled vocabulary, and allowed them to progress in reading as rapidly as their individual vocabulary development would permit.

Because there was intense interest in reading instruction, the Reading Study Project was launched during the 1959-1960 school year. This project involved sixty-seven teachers from eleven school districts who volunteered to teach one of three defined approaches to the teaching of reading. These approaches were named the Basic Method, the Individualized Method, and the Language Experience Approach (successor to the creative writing approach). The project was exploratory in nature. Systematic comparison of the effectiveness of the language curricula was not attempted; however, standardized test evidence indicated that children seemed to do as well in the Language Experience Approach as they did in Individualized or Basic Methods. The Reading Study Project is reported in a series of monographs entitled "Improving Reading Instruction," published by the Superintendent of Schools, Department of Education, San Diego County.

Participation in the Reading Study Project sustained an interest in the Language Experience Approach and even encouraged some school districts to adopt this methodology in their language arts curriculum.

Educators and parents have been extremely concerned with the lack of research evidence regarding the effectiveness of an experience approach. Since several years have elapsed, during which time many teachers have become experienced in this type of approach, it was felt that a contribution to the field of knowledge could be made by the study reported here. The Department of Education, San Diego County, is very much aware of the difficulty involved in doing "human being" research in the classroom. It is felt, however, that the current study gives some clues as to strengths and weaknesses which exist in an experience approach.

THE OBJECTIVES

The study was designed to determine the relative effectiveness of the Experience Approach to the teaching of the language arts as compared with the Traditional Method. To accomplish this, four areas of the language arts were separately measured—namely, reading, writing, listening, and speaking. In addition, an index of development in reading interest was taken and pupil attitude toward reading determined. The following hypothesis was tested: Will two defined methods of instruction in the language arts produce measurably different results in achievement of first grade pupils?

Answers to the following questions were sought:

1. Which of the two methods tested produced a significant difference in reading achievement?

2. Which method produced a significant difference in listening?

3. Which method produced a significant difference in speaking?

4. Which method produced a significant difference in writing?

5. Which method produced a significant difference in attitude toward reading?

6. Which method produced a significant difference in interest in reading?

7. Which method is most appropriate for children of different ability levels?

8. Which method is most appropriate for students of different socio-economic levels?

9. Which method is most appropriate for boys?

10. Which method is most appropriate for girls?

CHAPTER II

SELECTED RELATED RESEARCH

Although the interrelatedness of reading and other facets of the language arts has been noted by various writers, few systematic studies of the nature of these relationships exist. Gray[1] has proposed that instruction in all the language arts be provided in a closely integrated program. Martin[2] studied developmental interrelationships among language variables in first grade children. Coefficients of correlation among seven variables were determined at the beginning and end of the first grade on 240 children. Only one oral language measure, the number of different words used, showed a low positive relationship to reading readiness at the beginning and achievement at the end of the first year. The relationship of oral language to the reading of first grade children which exists when the teacher uses the children's actual language in making reading materials was not explored in the Martin study.

The effect of children's oral language on reading was explored in a short-term study by Lane[3]. This study also yielded information on the value of the in-service training which the teachers were provided for improvement in reading instruction.

The reports of investigators regarding the desirability of recognizing the interrelatedness of various language factors and the logic of basing an instructional program upon an integrated approach support the notion that systematic research on the effectiveness of an integrated approach is needed. The lack of valid information was also cited by a study group of the Project English Research Conference[4]. This group affirmed the need for studies of the relationship between the teaching and learning of reading, speaking, listening, and writing.

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[1]Gray, William S. "Reading." Encyclopedia of Educational Research. Chester W. Harris, ed. 3d ed. Macmillan, 1960, pp. 1117-1118.

[2]Martin, Clyde. "Developmental Interrelationships Among Language Variables in Children of the First Grade." Elementary English. Vol. XXXII, March 1955, pp. 167-171.

[3]Lane, K. Boyd. "A Description, Analysis, and Evaluation of Three Approaches to the Teaching of Reading." Doctoral Dissertation. North Texas State University, August 1963.

[4]Strickland, Ruth G. "Some Important Research Gaps in the Teaching of Elementary Language Arts." Needed Research in the Teaching of English. U.S. Office of Education Cooperative Research Monograph Number 11, 1963, p. 9.

Clymer[5] points out that much of the research in language arts has been conducted by means of short-term, single-variable studies. Such research provides tantalizing leads but does not permit us to determine clearly the influence of the development of one language art upon another. While difficult to design and carry out, the importance of such studies makes it imperative that this research be done.

Strickland[6] also has noted our dependence upon an accumulation of opinion and tradition rather than upon reliable research in listening, speaking, reading, and writing.

Research that has been focused directly on an "experience approach" to the teaching of the language arts is particularly sparse. In Gunderson's review of Research in Reading at the Primary Level[7] she cites a study by Basting. This study compared the effectiveness of an experience approach to beginning reading with the procedure of using a teacher's manual of a basal series. Her population was limited to sixty students in two groups in the first grade. She found a significant difference in the number of words reproduced in favor of the experience approach but found no significant difference between the groups in comprehension or word recognition and meaning.

Russell and Fea[8] have pointed out that in reality there can be no single sensory approach to reading for normal children. The "experience approaches" were designed to use several of the senses. These approaches emphasized meaning in reading rather than identification-recognition, although the two are related. Anderson and Dearborn[9] believe that the chief value of such approaches lies in the formation of a context (experience) to enable the reader to test his attempts at word recognition and interpretation of reading material.

Justification for the experience approach to reading is found in the theoretical position that the language symbol system used by children in listening, speaking, reading, and writing has meaning to the individual child only in terms of his own past experiences. The instructional program which systematically reinforces

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[5]Clymer, Theodore. "Language Arts and Fine Arts - Foreword." Review of Educational Research. Vol. XXXI, April 1961, p. 117.

[6]Strickland, loc. cit.

[7]Gunderson, Doris V. Research in Reading at the Primary Level. U.S. Department of Health, Education and Welfare, 1963, pp. 6-7.

[8]Russell, David H., and Fea, H. R. "Research on Teaching Reading." Handbook of Research on Teaching. N. L. Gage, ed. Rand McNally, 1963, pp. 865-928.

[9]Anderson, Irving H., and Dearborn, W. F. The Psychology of Teaching Reading. Ronald Press, 1952.

the close tie of the symbols (words) with individual and collective experience will reinforce the development and expansion of meaning. Comprehension and meaning rather than rapid and adroit symbol manipulation became the major focus of this instruction.

It is clear that well-conceived, carefully controlled, longitudinal studies of appropriate populations are needed before any conclusions can be stated with conviction regarding the characteristics of the complex interrelationships among the language arts. It is also obvious that teaching approaches which show promise for helping children acquire these vitally needed skills must be subjected to scrupulous research in order that teaching methods may be soundly based.

CHAPTER III

PROCEDURES

TREATMENT DIFFERENTIATION

The purpose of this research study was to determine the relative effectiveness of two approaches to the teaching of language arts at the first grade level. A description of the two treatments follows.

Experience Approach

The Experience Approach involves the integrated teaching of the skills of listening, speaking, writing, and reading. In this approach the language arts are taught as one program so that the development of skills in one area is related to and reinforces the development of skills in other language arts areas. The language and thinking of the individual child constitute the basis for all skill development. The following criteria and rationale statements serve as guidelines for the Experience Approach.

CRITERIA[10]	RATIONALE
1. The teacher creates situations in which each child feels encouraged to produce something of his own thinking and interest using familiar media such as crayon, pencil, and paint.	1. All learning must be based upon the previous experience of learner. In expressing what he knows the child should use familiar media of expression. Those which are normally used in the home and the kindergarten should be continued into the first grade and beyond.
2. The teacher gives each child an opportunity to express his thinking through oral language. The child responds as an individual, as a member of a small group, or in the total class group.	2. Oral language is a base from which written language emerges. Until the child is able to express his ideas through speech, he is less able to communicate effectively with others and has a limited basis upon which to build a writing-reading vocabulary.

[10]San Diego County, Superintendent of Schools. "Description of Three Approaches to the Teaching of Reading." Improving Reading Instruction, Monograph No. 2. May 1961, pp. 20-25.

CRITERIA	RATIONALE
3. In the primary grades, the teacher extracts from the oral expression of the individual a sentence or two which summarizes his story. The teacher records the child's story in summary form for the child and in his presence, using as much of the child's language (his particular mode of expression) as possible.	3. A fundamental concept which the child must hold about "what reading is" is that it is speech written down. As the child sees his own speech taking the form of writing, he is developing readiness for both writing and reading. By using the child's expressed thoughts, meaningful content related to his background of experience is provided. He is thus able to identify more closely with the written material.
4. When using small groups, the teacher records the story in the presence of the children, having them arranged so that they can observe the writing.	4. The informal grouping around the teacher as he writes the dictation of one child after another gives all children a feeling of participation in the total experience of the group.
5. As the teacher writes he takes opportunity to call attention to letter formation, relationship of beginning sounds to the symbols used, repetition of sound and symbol in many situations, capitalization and punctuation, and sentence sense.	5. The natural way for a child to understand "what reading really is" is to observe the recording of his own speech with the letters of the alphabet. Teaching language skills with reference to an actual meaningful task is an effective procedure.
6. The teacher and children carry on informal discussions which relate to the problem of helping them understand that what they say is being symbolized with the letters of the alphabet.	6. When the child has insight into and understanding of the reasons and procedures underlying a written language system, his ability to make use of the system is enhanced. He understands that what he has represented in painting and drawing and said orally can be symbolized in conventional written form and read.

CRITERIA	RATIONALE
7. The teacher binds the productions of small groups into books that can be used in follow-up activities in the classroom. The teacher may have the same group involved in such activities as recalling what was recorded on a previous day, recognizing letters and words, matching words that are alike, suggesting a new story, etc. One group of children might read pupil-produced books developed by other groups.	7. Interest in learning to write and read is stimulated by the use of materials produced within the classroom. Reading books authored by pupils in a class motivates the child to try to achieve competence in reading beyond normal expectations. As the teacher and children work with reading material which has been produced in the classroom, there is increased interest in analyzing the skills involved in producing a book. The appreciation and skills derived from these activities help children to move with enthusiasm into the reading of commercially prepared reading materials.
8. As soon as the teacher is aware that a few children can copy simple words, he helps them to write what they call their own stories. These are usually such stories as might accompany a self-portrait, recording a recent experience, planning individual or group activities.	8. Children who are helped to move into writing on their own at an early age are developing a balance in communication skills which is desirable for better understanding of our language and its use in daily life. Simple beginnings in writing in the early part of the first grade are challenging and interesting to children. A basic objective of language instruction is to help the child recognize and capitalize upon the natural interrelatedness of writing, reading, speaking, and listening.

CRITERIA	RATIONALE
9. A variety of independent activities (using crayon, pencil, paint, etc.) is open to the child during the time in which he is not directly involved in individual or small group sessions with the teacher. These pupil products may serve as the bases for total class experiences in language. The child's interpretation of his independent work is recorded by the teacher or the child himself for the whole class to see. In this way, provision is made for an additional experience from which the class is able to see how thoughts are recorded in writing. Instruction in skills appropriate to the task at hand, plus further discussion of the purposes of writing, can be carried on in this type of situation.	9. Most children seek activities such as painting, crayon sketching, dramatizing, etc., because they have experienced some previous success in using these media. Young children are able to express their ideas more freely through such activities as these than through writing alone since these activities place fewer restrictions on ideas and vocabulary. The individual child sees a clearer purpose for his independent work when his own product is used for instructional purposes. Children who have mastered the basic skills of writing in conjunction with reading will continue to find it helpful to use a variety of media in communicating.
10. The teacher and children develop a simple routine for guiding and utilizing children's independent activity productions. This routine might include (a) procedures for selecting and distributing materials, (b) procedures for displaying or storing products, (c) procedures for presenting the material and sharing experiences.	10. The establishment of simple routine procedures allows the teacher and children to plan activities over an extended period of time. Thus language activities that are held on different days are more clearly seen as interrelated; e.g., writing to reading, speaking to writing, etc. The routines necessary for this type of organization give the children the security that comes from knowing what comes next.
11. The teacher utilizes the activities and procedures which provide the background and motivation that enable the individual child to make a self-commitment to write on his own. The teacher is constantly alert to the emergence of such a development in each child.	11. There is a period of maturation when the child is physically, socially, and mentally ready to write. This stage of development is unique to each child. One of the best evidences of readiness for writing is the child's own indication of his desire to write.

CRITERIA	RATIONALE
12. After the child makes the self-commitment, the emphasis in the teacher's role changes from one of motivating the child to one of facilitating his development in the communication skills. The teacher encourages the child to express his experience in appropriate forms of communication. Assistance is given the child in planning his independent effort and in the specific skills required for it.	12. One of the major goals of language instruction is to help all children to become more and more independent in their ability to communicate. This independence develops over a period of time, necessitating varying degrees of teacher guidance depending upon the child's level of development.
13. The teacher may invite other children to react to a child's independent production (a painting, a model, an idea for a play) and to indicate what they would write about it.	13. Children learn from other children and develop a feeling of cooperation as they interact through sharing their own communication efforts. The children begin to sense the great variety of ideas possible in interpreting a production and gain some experience in making discriminative responses. The elements of creative thinking as well as critical thinking are utilized.
14. Children learn how to utilize a wider selection of communication materials as the environment of the classroom is enriched with their own productions and with other resources which they and the teacher bring. The teacher is working toward a goal of independence in each child, thinking through what is to be done, the difficulties to be anticipated, and the resources available to help the child solve his problems.	14. Children learn to evaluate and select appropriate materials when a wide choice is available. Abundant resources help motivate the child to pursue an interest further or to develop a new interest; they also help him develop proficiency in using communication skills.

CRITERIA	RATIONALE
15. As children continue to write independently, the teacher meets with them in small groups and works with them on vocabulary development. Children are provided with word lists which contain basic vocabulary words for their level as well as lists of general interest. The teacher encourages children to use these additional words in many ways. This enables children to increase their vocabulary with a minimum of direct teaching.	15. As children gain some confidence in reading and writing their own ideas, they need systematic help in expanding their vocabulary in reading by including in it those words they are most frequently using in their own language experiences.
16. As the child develops a firm grasp of a reasonably large sight vocabulary, including a good number of the basic words for his level, the teacher provides new printed materials for him to read. Opportunity is provided for the child to read orally when it is appropriate for him to do so. The teacher records the words with which the child has difficulty and provides experiences which enable the child to add them to his vocabulary.	16. Meaning of, facility in using, and recognition of printed words are enhanced when unfamiliar words are learned in contexts which are meaningful to the child. Success in first endeavors tends to sustain the child's interest in the task and inspires him to further effort.
17. As children have successful reading experiences they are provided more and more "book reading" opportunities. The child's interests, needs, and abilities are the prime factors considered as the teacher assists the child to move to higher levels of independence in reading. The child is encouraged to read for a variety of purposes.	17. The child needs the sense of achievement which comes as a result of increased independence in reading. He can recognize the pattern of his progress and realistically adjust his aspiration level at any given point. As the child branches out into many types and kinds of reading experiences, he begins to recognize his potential for greater independence in reading and the communication arts in general.

Using the preceding criteria and rationale statements as guidelines, specific teaching procedures were developed.

The Experience Approach used the language and thinking of individual children as the basis for skill development. Beginning with the first day of school each child was encouraged to share his ideas with others through the use of words and pictures. With repeated opportunities for sharing ideas, illustrating stories, and writing stories with teacher help, children began to develop writing vocabularies and were able to write their own stories independently. Devices such as picture-word charts, word cards, and room labels were provided to help children extend their writing vocabularies.

The motivation and building of experiences upon which the children and teacher based the language experiences of listening, verbalizing, and writing were derived from library books, basic texts, stories and poems read by the teacher or a child, open-ended sentences, films, filmstrips, study trips, class or small group discussions, art prints, and children's paintings. Children in the Experience Approach group were encouraged to use their personal experiences for language development, with content of the stories usually drawn from literature, science, and social studies.

Teachers in the Experience Approach group utilized the daily block of 120 minutes of language arts time in the following way:

Approximately 35 percent in writing activities, with emphasis on activities designed to motivate and stimulate ideas, illustrate pictures, dictate stories, and write individual stories;

Approximately 35 percent in reading activities, which included the reading of student stories, library books, and stories from the State-adopted textbooks;

Approximately 30 percent in direct skill instruction. The teacher taught skills to individual students as well as to small groups commonly referred to as "seminars." Each teacher utilized individual and group stories to determine skills to be taught, which included letter names and letter formation, word attack skills, capitalization, spelling, punctuation, etc. Emphasis in seminars was given to refining skills of speaking and listening.

Traditional Method

The Traditional Method tends to be structured around the materials of instruction which are supplied to the classroom teacher. The State-mandated program in California is representative of traditional methods. The California State Board of Education has adopted textbooks in the language arts for the classrooms of the State. Basal reading textbooks are introduced in the first grade.

A co-basal series is provided with readiness books, pre-primers, primers, and a graded series of readers. Graded text materials in language, spelling, and handwriting have been adopted for the primary grades.

In the Traditional Method, which generally follows the sequence and division of topics dictated by the adopted materials, reading instruction is usually separate from instruction in the other language arts areas and is introduced before writing. Listening and speaking skills are taught only incidentally in sharing activities.

The following criteria and rationale statements serve as guidelines for the Traditional Method.

CRITERIA[11]	RATIONALE
1. The teacher attempts to assess the reading ability of each student for the purpose of establishing reading groups. He uses results of standardized reading tests, observation of pupils, intelligence tests, information from other teachers, previous books read, and consideration of class size and make-up.	1. Information concerning the child's reading ability, intelligence, interest, attitudes, and previous learning experiences needs to be analyzed if he is to be placed in the best possible reading instructional situation. Children with similar reading abilities can be taught more effectively in groups than can groups of children with wide differences in reading ability.
2. On the basis of available student information the teacher assigns each child to a reading group. Groups are formed on the basis of reading ability with some flexibility for placing children in groups on other bases. Children may be moved from one group to another when they have need for a new group experience. In the typical class of 25 to 30 children three groups are considered adequate.	2. Children of similar abilities placed in small groups can be more easily instructed in reading skills. Materials of instruction can be prepared in terms of group needs on the basis of group ability. Children progress at different rates, which necessitates flexibility in assigning a child to different groups when his reading development indicates need for change.

[11] Ibid., pp. 10-13.

CRITERIA	RATIONALE
3. At reading instruction time the teacher works with each group separately (usually in a reading circle situation). The teacher follows the suggestions for sequence, content, etc., set forth in the manual which accompanies the basic and supplementary series. While the teacher works with one group, the other children work at seatwork assignments or in self-selection activities such as art, word games, etc.	3. Since the needs of the group differ and since there are more opportunities for individual help in a small group, the teacher works most effectively through direct instruction activities geared to the ability of each group. In the small groups it is possible for each child to read orally, take part in discussion, tell a story, participate in skill building activities, etc. Children learn to work independently as they have opportunity for independent work (seatwork) while the teacher is working directly with one of the groups in a reading circle. (The teacher's manuals offer directions for carrying out a systematic reading program which accommodates several levels of ability.) Seatwork assignments which are correlated to the basic reader stories are included in the manual. Assignments for creative activities are also included.

CRITERIA	RATIONALE
4. Generally, the plan of instruction for individual groups entails a definite procedure which includes these steps (procedure varies in different series and at different grade levels): · Setting purpose (motivation, background information, etc.). · Introducing new vocabulary and teaching necessary skills. · Silent reading by pupils. · Oral reading by pupils. · Discussing story read. · Independent activities (workbooks, seatwork, teacher-guided skill development, supplementary silent reading).	4. Certain logical procedures have proved successful in the teaching of reading printed symbols. Children learn best when they are motivated. To enhance accurate reading and provide for success, skills related to the lesson and new words taken from the lesson may become part of the daily reading activity. Silent reading provides for the fortification of skills. Oral reading provides the child with an opportunity to communicate with others. The teacher is able to evaluate the child's reading progress during oral reading. Follow-up activities provide for additional opportunities to use skills and vocabulary previously introduced as well as to pursue interests related to the content of stories read. Follow-up activities can be used to evaluate student progress.
5. The teacher attempts to establish the purposes of reading in a given lesson. He generally follows the suggestions of the manual. Interests of the group in a particular topic may be used when related to the lesson story to be read.	5. Children's interest in and understanding of the purpose of a task improve the learning situation. The suggestions offered in the teacher's manual take into account what is known about children's interests and ways in which children may be stimulated.

CRITERIA	RATIONALE
6. New words are introduced to the children before they encounter them in a story context. These new words are part of a carefully controlled vocabulary around which the entire series is built. Word attack skills which are needed in solving these new words are taught. Other skills to be emphasized are suggested in the manual. (In primary grades much emphasis is given to developing a basic sight vocabulary.) Instruction is aimed at developing meanings for new words being introduced for a given lesson. New words follow a sequence which is based upon criteria of relative difficulty, interest as to age, level, etc.	6. Children have more success with printed symbols when they are prepared to cope with specific problems they will encounter when reading the new story in the basic text. When the vocabulary is controlled in this manner, only a few new words are introduced in each lesson. In addition, words which have been previously introduced are repeated in succeeding stories. This technique enables the child to handle a small number of new words and to maintain a growing number of previously learned words from a basic vocabulary list.
7. After discussion of new words and points developed in the story, children are generally required to read the story silently, keeping in mind the purposes that the teacher established with the group. (This procedure varies with grade level and may range from short sentences to complete stories.)	7. Questions are used to focus on the main points of the story and to guide reading for certain purposes. By then reading the story silently, children are better able to understand the content of the story.
8. Children in each group are given many opportunities to read orally. Oral reading is generally done in the group itself by individuals while the others serve as a small audience. Children in the group discuss and react to elements of the story and the presentation of the individual reader. The teacher may provide individual instruction in specific skills as he reacts to the oral reading.	8. When children read orally, the teacher gains an opportunity to evaluate such reading abilities as pronunciation, phrasing, word attack skills, expression, speed, and fluency. The teacher is enabled to appraise listening skills of group members. Oral group reading also serves as a means of sharing.

CRITERIA	RATIONALE
9. Prior to and following directed reading lessons, pupils are expected to engage in a variety of planned independent activities. Many of these activities are related to the lesson, such as workbook exercises which accompany the basic text, use of teacher prepared worksheets, and related recreational reading. Activities not directly related to the lesson itself are provided for by the teacher. These include reading in various content fields, recreational reading, expressive activities (group dramatization, creative writing), practice activities.	9. It is necessary that children not under the direct supervision of the teacher be provided with a variety of well-planned independent activities to reinforce and extend reading skills.

Using the preceding criteria and rationale statements as guidelines, specific teaching procedures were developed. The Traditional Method group adhered very closely to the teacher's manual for each reader in the Ginn Series as a guide to instructional procedures.

Three or four chart stories containing two or more words from the vocabulary of the Ginn pre-primers were developed weekly during the beginning part of the school year. This program of introducing and reusing basic words in chart stories continued until most children had mastered a basic sight vocabulary of from 46 to 56 words. However, chart stories continued to be a part of the reading program throughout the school year. The Readiness Books, Fun With Tom and Betty and Picture Stories, which involve a controlled vocabulary, were used as needed with the chart stories. During this time the children were members of one large group for approximately one week. The group was then divided, and at the end of the third week three reading groups usually had been formed.

As each group developed proficiency in recognition of vocabulary, fluency and expression when reading chart stories, and ease in the mechanics of reading, the group moved into the use of the Ginn pre-primers. Additional pre-primers of other basal series could be used if needed to reteach or maintain skills, increase fluency, develop comprehension, or enhance reading enjoyment. When the groups indicated readiness to move into more difficult material, they were placed at the next higher level.

The Ginn Enrichment Series, the Prose and Poetry Series, and the Wonder Story Books were used in the literature program in addition to a great variety of

trade books and collections of prose and poetry. Accelerated students could move beyond grade level limitations if the policies in the district permitted this procedure. One-hundred twenty minutes were devoted to direct instruction in reading, writing, listening, and speaking. Every teacher was encouraged to make full use of the suggested enrichment activities which appeared in the teacher's manual accompanying the Ginn Reading Series.

Instructional Materials

The following instructional materials were used by participating teachers:

Control Group (Traditional Method)

Ginn Basic Readers

Fun With Tom and Betty
My Little Red Storybook
My Little Green Storybook
My Little Blue Storybook
Little White House
On Cherry Street

Ginn Basic Readers - Enrichment Series

Come With Us
Under the Apple Tree

Sheldon Basic Reading Series

Picture Stories - Readiness
At Home - Pre-primer 1st Level
Here and Near - Pre-primer 2nd Level
Here and Away - Pre-primer 3rd Level
Our School - Primer
Our Town - First Reader

Prose and Poetry Series

Story Wagon
Story Time

Success in Spelling

Manuscript Writing Made Easy

Experimental Group (Experience Approach)

(Instructional procedures and materials for the Experience Approach group were controlled by guidelines developed by the project staff.)

Films — Let's Write a Story
Churchill Films
Los Angeles, California

Sample Units

Allen, R. Van. At Home and School. Department of Education, San Diego County. 1962.

——Beginning Writing Experiences. 1962.

——Exploring Wildlife Around Us. 1961.

——Language-Experience Approach to Reading. 1959.

Time Schedule

The following time schedule was adhered to as closely as possible.

Traditional Method

First Semester				Second Semester	
First Six Weeks	Minutes	Twelve Weeks	Minutes		Minutes
Directed Reading	100	Directed Reading	100	Directed Reading	100
Literature		Oral and Written Expression		Literature	
Oral Expression		Literature		Library Reading	
Handwriting	20	Additional Literature	10	Oral and Written Expression	
Written Expression		Handwriting and Written Expression	10	Handwriting	20
				Spelling	
Total Time	120	Total Time	120	Total Time	120

Experience Approach
(Both Semesters)

All Language Arts Integrated Total Time 120 Minutes

POPULATION

Teacher Selection

The 54 teachers participating in the study were selected by sampling procedures from among 313 first grade teachers in San Diego County school districts. All 313 teachers had one or more years of teaching experience. The San Diego County "Teacher Inventory of Approaches to the Teaching of Reading" (Appendix B) was administered to identify which teachers were presently using the Experience Approach and which were using the Traditional Method. A conference with each teacher's principal or supervisor was held to determine the level of consistency between the teacher's response on the instrument and the administrator's judgment as to the method actually being employed in the classroom. After each teacher's method had been verified in this manner, a table of random numbers[12] was used to select 27 teachers for each of the two treatment groups.

All teachers in the treatment groups were females. The age distribution was similar in both groups. With respect to earned degrees, only three teachers (these in the Traditional Method group) had not earned the B.A. degree, and only one teacher (in the Experience Approach group) had earned the M. A. degree. In terms of the type of certificate held, all of the Traditional Method teachers possessed the Standard Certificate, while four teachers, all in the Experience Approach group, had Provisional status. Teachers in the two groups had similar amounts of teaching experience, except in the category of "over 20 years of teaching experience": seven teachers in the Traditional Method group as against three in the Experience Approach group. The number of years of first grade experience favored the Traditional Method group. There was no difference between groups as to marital status. In terms of number of children in the teacher's family, the two groups were similar except that three families in the Experience Approach group had more than four children.

The characteristics of these teachers are shown in Figure I on page 22.

Pupil Population

The pupil population of the study came from 41 elementary schools of 17 school districts located in various parts of San Diego County. These districts ranged in enrollment from 169 students to 13, 500 students. Diverse geographic conditions and socio-economic levels were represented.

The original student population included 411 boys and 371 girls in the Experience Approach group and 446 boys and 381 girls in the Traditional Method group. By the end of the experimental period, the student population had decreased to 337 boys and 308 girls in the Experience Approach group and 355 boys and 302 girls in the Traditional Method group.

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[12] Peatman, J. G., and Schafer, R. "A Table of Random Numbers from Selective Service Numbers." Journal of Psychology, 14:296-297, 1942. (In Handbook of Mathematical Tables, by Shelby, West, Shankland, and Hodgeman. Chemical Rubber Publishing Company, 1963.)

FIGURE I

TEACHER CHARACTERISTICS

Characteristics	Traditional Method				Experience Approach			
Sex	Male = 0		Female = 27		Male = 0		Female = 27	
Age	Under 30 yrs. 7	30-50 yrs. 12	Over 50 yrs. 8		Under 30 yrs. 9	30-50 yrs. 11	Over 50 yrs. 7	
Highest Earned Degree	With No Degree 3	With B. A. 24	With M. A. 0		With No Degree 0	With B. A. 26	With M. A. 1	
Type of Certificate Held	With Provisional 0		With Standard 27		With Provisional 4		With Standard 23	
Years of Teaching Experience	Under 10 11	10-20 9	Over 20 7		Under 10 13	10-20 11	Over 20 3	
Years of First Grade Experience	Under 5 8	5-15 11	15-30 8		Under 5 12	5-15 12	15-30 3	
Marital Status	Single 5	Married 18	Widow or Div. 4		Single 5	Married 18	Widow or Div. 4	
Number of Children in Teacher's Family	None 11	1-3 16	4-6 0	Over 6 0	None 10	1-3 14	4-6 3	Over 6 0

Community Characteristics

Descriptive information was sought on characteristics of the school communities represented in the study. In regard to median years of education of adults in the school communities, the proportion of adults with high school education favored the Experience Approach group. With respect to median family income, the two groups were essentially comparable. Of the 27 school communities where the Traditional Method treatment was located, 26 had more than 10,001 population and 1 had between 5,001 and 10,000. Communities where the Experience Approach was being used included 2 under 2,500 population, 2 between 2,501 and 5,000, 6 between 5,001 and 10,000, and 17 exceeding 10,001.

Community information is shown in Figure II on the following page.

FIGURE II

COMMUNITY CHARACTERISTICS

	Traditional Method				Experience Approach			
Median Years of Education (Adults)	Some High School 9		High School 12		Above High School 6	Some High School 3		High School 17	Above High School 7
Median Income	3,000-4,000 4	4,001-5,000 1	5,001-7,000 15	Over 7,001 7		3,000-4,000 1	4,001-5,000 3	5,001-7,000 16	Over 7,001 7
Population of School Community	Under 2,500 0	2,501-5,000 0	5,001-10,000 1	Over 10,001 26		Under 2,500 2	2,501-5,000 2	5,001-10,000 6	Over 10,001 17

A measure of socio-economic class was incorporated in the research design in order to assess the possible effects of this variable in the comparisons. This was done by collecting information about the father of each pupil in the study. The measure employed was a modification of a scale developed by Centers.[13] This scale assesses three dimensions of socio-economic class: occupation, power, and economic status. The three dimensions have been combined to produce one value describing socio-economic class. The method of arriving at a single value is shown in Appendix B. In order to determine the possible effects of socio-economic class the scale was divided into high, middle, and low categories. An artificial distribution placing 50 percent in the middle and 25 percent in each of the upper and lower categories was constructed in the following manner: Single scale values in the range 00-05 were categorized as low; values in the range of 06-11 were categorized as middle; values in the range 12-24 were categorized as upper.

The Pintner-Cunningham Primary Test of Intelligence (1964 revision) was administered to all pupils in the experiment by the classroom teachers at the end of September 1964. Comparisons between the Experience Approach group and the Traditional Method group on control variables are shown in Figure III. It should be noted that there are differences between the two groups on all six variables.

Characteristics of the participating schools may be examined in Figure IV. The length of the school year was the same for all participating schools. Average size of participating classes was 31 for the Traditional Method group and 29 for the Experience Approach group. Length of the school day was longer in the Traditional Method schools.

All school districts participating in the study provided a regular kindergarten program. Only 85 students in the study had not attended kindergarten.

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[13]Centers, Richard. The Psychology of Social Classes: A Study of Class Consciousness. Russell and Russell, 1961, p. 51. (Originally published by Princeton University Press, 1949.)

FIGURE III

CONTROL VARIABLE COMPARISON OF THE EXPERIENCE APPROACH GROUP AND THE TRADITIONAL METHOD GROUP

Variable	Experience Approach Instructional Group N = 645	Traditional Method Instructional Group N = 657
Chronological Age		
Mean	75.763	76.504
Variance	20.295*	25.361*
Pintner-Cunningham Raw Score		
Mean	39.702*	37.537*
Variance	70.074*	92.760*
Thurstone—Pattern Copying		
Mean	17.549*	18.626*
Variance	52.926	56.430
Thurstone—Identical Forms		
Mean	15.808*	17.466*
Variance	86.918*	106.108*
Metropolitan Total		
Mean	55.698	57.008
Variance	208.859*	261.598*
Socio-Economic Class		
Mean	9.203*	8.355*
Variance	22.601*	25.030*

*Significant difference at the .05 level of confidence.

FIGURE IV
CHARACTERISTICS OF PARTICIPATING SCHOOLS

	Traditional Method				Experience Approach			
Size of Participating Elementary Schools	Under 200 0	200-400 1	Over 400 26		Under 200 1	200-400 3	Over 400 23	
Average Size of Participating Classes	31				29			
Length of School Day (hours)	3.0-3.5 1	3.6-4.0 7	4.1-4.5 4	4.6-5.5 15	3.0-3.5 2	3.6-4.0 12	4.1-4.5 3	4.6-5.5 10
Length of School Year (days)	176-180 27	181-185 0	186-190 0		176-180 27	181-185 0	186-190 0	
Number of First Grade Rooms in the District	1-10 2	11-20 2	Over 20 23		1-10 4	11-20 7	Over 20 16	
Number of First Grade Rooms in the Building	1-2 4	3-4 18	Over 4 5		1-2 4	3-4 16	Over 4 7	

IN-SERVICE EDUCATION

Teachers who participated in the study attended in-service meetings prior to and during the progress of the experiment. Activities for each treatment group were organized and conducted by an assigned curriculum coordinator from the Department of Education, San Diego County, and by outside consultants. Two meetings were held prior to the experimental period. The first meeting acquainted teachers with the general design of the project and provided instruction in procedures to be used in administering pretest instruments. The second involved outside consultants. Dr. R. Van Allen, Professor of Education, University of Arizona, worked with the Experience Approach group; Dr. Mildred Dawson, Professor of Education, Sacramento State College, conducted activities for the Traditional Method group. In-service sessions were designed to assure that participating teachers would teach effectively in the method prescribed for them. After the experimental period began, teachers met monthly to participate in a continuing in-service program. Both treatment groups attended an equal number of meetings and were given an equal amount of consultant time and help from the curriculum coordinator. During the experimental period coordinators visited the classrooms of teachers in their treatment groups on a regularly scheduled basis to help teachers stay within the design of the study.

INSTRUMENTATION

The following pretest instruments were administered between September 28 and October 12, 1964.

Pintner-Cunningham Primary Intelligence Test

Metropolitan Reading Readiness Test

Murphy-Durrell Diagnostic Reading Readiness Test

Thurstone Pattern Copying and Identical Forms Test

Detroit Word Recognition Test

In addition to these, the following locally developed measures were employed.

1. A measure of listening was administered to all students in the study prior to and at the conclusion of the experimental period.

2. A two-minute sample of children's conversation (child to adult) was recorded in October and again in May.

3. Monthly samples of each pupil's written expression were collected throughout the experimental period. A common unfinished sentence or story topic was used by both treatment groups to stimulate writing.

4. Each class in the experiment was given a fifteen-minute activity period each week. During this period pupils had an opportunity to draw, write, or read. The teacher observed and recorded the names of those pupils who elected to spend their time reading.

At the conclusion in May 1965, of the 140-day experimental period, the Stanford Achievement Test, Primary I Battery, Form X, and the San Diego County Inventory of Reading Attitude were administered.

The following individual tests were administered to a random sample of students in each treatment group at the conclusion of the experimental period:

Gilmore Oral Reading Test

Gates Word Pronunciation Test

Fry List of Phonetically Regular Words—Oral Reading Test

Karlsen Oral Reading Test

Group tests were administered by the classroom teacher, individual tests by the research staff. Prior to administering tests each teacher attended in-service sessions which centered attention on procedures to be followed. All tests were scored by trained third parties and then rechecked for accuracy.

CHAPTER IV

ANALYSIS OF DATA

THE STATISTICAL MODEL

The fundamental question posed by this research was, "Is there a difference in the efficiency of the two methods of instruction?" To make this comparison of two first grade public school populations presenting a wide range of attributes a powerful research tool was needed. Substantial opinion[14, 15] supports the view that analysis of covariance is to be preferred to analysis of either post-test scores or gain scores. Consequently, the multivariate approach to analysis of covariance as presented by Cooley and Lohnes[16] was selected. This choice was subsequently supported by the observation that, although randomly selected, students in the Traditional Method group and the Experience Approach group differed significantly on all six of the control variables. The effects of these initial differences would be statistically removed in the analysis of covariance.

Simple global comparisons between the two groups were unfeasible because of subgroup differences in the population under study. It was necessary to refine the fundamental hypothesis in terms of the dependent variables to be examined and in terms of the possible subgroups. Aside from the identification of the 25 dependent variables on which differences were hypothesized, it was also necessary to inquire whether a given instructional method functioned differentially with respect to sex, socio-economic level, or intelligence. If not, the two methods could be compared on the basis of the two total populations. If there were differences on any of these factors, however, it would be necessary to compare the two methods of instruction for each of the various subgroups.

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[14]Campbell, Donald T., and Stanley, Julian C. "Experimental and Quasi-Experimental Designs for Research on Teaching." Handbook of Research on Teaching, N. L. Gage, ed. Rand McNally, 1963, pp. 171-246.

[15]McNemar, Quinn. Psychological Statistics. 3d ed. John Wiley and Sons, Inc., 1962.

[16]Cooley, William W., and Lohnes, Paul R. Multivariate Procedures for the Behavioral Sciences. John Wiley and Sons, Inc., 1962.

TESTS OF POOLABILITY

The first analyses were designed to answer the preceding questions. It was found that the main deck* could not be pooled on either sex or socio-economic class. The writing sub-deck* could not be pooled on sex. The speaking sub-deck* and the Gilmore sub-deck* could be pooled for both sex and socio-economic class.

Subsequent analyses of data for the two groups were performed as this information dictated. It was assumed at this juncture that it would not be possible to pool the data for children of differing intellectual capacity. This difference was dealt with in an alternate manner. Since most classrooms are heterogeneous with respect to ability, the principal analyses were performed ignoring possible differences in the effect of instructional method on children of varying abilities. A second series of analyses was done dividing the data by ability groups.

PRINCIPAL FINDINGS

The results of the principal analyses are summarized in Figure V (see page 33) to show only the significant differences. Full data appear in detail in the tables which complete Chapter V.

Comparisons

Comparisons favoring the Traditional Method group are as follows:

	See Table No.
Stanford—Paragraph Meaning—lower class males	5
Stanford—Paragraph Meaning—middle class males	6
Stanford—Paragraph Meaning—upper class males	7
Listening—lower class females	8
Stanford—Paragraph Meaning—middle class females	9
Speaking—Number of Different Words	2
Speaking—Total Number of Words	2
Speaking—Mean Sentence Length	2
Speaking—Mean Sentence Length (5 longest sentences)	2
Speaking—Sentence Complexity	2

*Main Deck—All children with information on the Stanford, attitude, interest in reading, and listening.
Writing Sub-Deck—Children who had been administered all aspects of the writing test.
Speaking Sub-Deck—Analogous to the writing sub-deck.
Gilmore Sub-Deck—Those children who had been administered the Gilmore, Fry, Karlsen, and Gates tests.

Comparisons favoring the Experience Approach group are as follows:

	See Table No.
Interest in Reading—lower class males	5
Stanford—Arithmetic—upper class females	10
Writing—Total Number of Words—males	3
Writing—Total Number of Words—females	4
Speaking—Ratio (Number of Different Words to Total Number of Words)	2

EFFECT OF INTELLECTUAL DIFFERENCES

Two hundred twenty-five comparisons were made of the data subdivided on intellectual bases. Some differences appearing in earlier analyses now disappeared. Such disappearance may be accounted for by the small number of cases in the subgroups studied and may possibly be attributable to the Beta error. Only two differences were found which hd not appeared earlier. These can probably be attributed to the Alpha error because of the number of comparisons performed.

FIGURE V

SIGNIFICANT DIFFERENCES IN THE EFFECT OF INSTRUCTIONAL MODES

TM = Traditional Method
EA = Experience Approach

Sex	Male			Female		
Socio-Economic Class	Low	Mid	Up	Low	Mid	Up
Attitude						
S: Word Reading						
S: Paragraph Meaning	TM	TM	TM		TM	
S: Vocabulary						
S: Spelling						
S: Word Study						
S: Arithmetic						EA
Interest in Reading	EA					
Listening				TM		
Writ: Number of Different Words						
W: Total Words		EA			EA	
W: Mean Sentence Length						
W: Complexity						
W: Spelling						
Speak: Number of Different Words			TM			
S: Total Words			TM			
S: Ratio			EA			
S: Mean Sentence Length			TM			
S: Mean Length of Five Longest			TM			
S: Complexity			TM			
Gilmore: Accuracy						
Gilmore: Rate						
Fry						
Gates						
Karlsen						

It would appear that further analysis of the data subdividing for intellectual differences would be unproductive. Examination of the data divided on intellectual differences only, pooling on socio-economic class, might be performed. Such a procedure would overcome the problem of small numbers and reduce the tendency to Beta error somewhat. This additional analysis is not contemplated, however, since knowledge concerning the applicability of the methodology to differing socio-economic groups would appear to have more immediate practical significance.

DIFFERENTIAL MORTALITY

A study of those pupils who dropped out of the experimental groups was also conducted. An analysis of the control variables revealed that for both groups those who dropped out were younger chronologically and mentally, less ready for school as measured by scores on the Thurstone and Metropolitan tests, and from a lower socio-economic group. While this may limit generalizing from the findings somewhat, these differences were moderate, and since youngsters of similar characteristics probably remained in both groups throughout the study, this limitation should not be regarded as too serious.

Children who dropped out of the Experience Approach group were significantly younger than those who dropped out of the Traditional Method group. They were also more varied with respect to both mental and chronological age. Such differential mortality reaffirms the wisdom of using the analysis of covariance.

CHAPTER V

SUMMARY AND CONCLUSIONS

SUMMARY

Based solely on the number of observed differences, the Traditional Method group revealed more centroids of strength in the various comparisons than did the Experience Approach group. It is not, of course, possible to equate these values. Some undoubtedly have greater significance for learning than others. Specifically, the Traditional Method group showed superiority in Paragraph Meaning as measured by the Stanford Achievement Test for males in all three socio-economic levels and for females in the middle class level. Lower class females excelled in listening. For five measures of speaking proficiency the Traditional Method group fared somewhat better than did the Experience Approach group. For lower class males, interest in reading favored the Experience Approach group. Both males and females in the Experience Approach group excelled in the total number of words written. The Experience Approach group was also superior to the Traditional Method group in ratio of the number of different words to the total number of words spoken. Upper class females of the Experience Approach group performed superiorly in the arithmetic section of the Stanford Achievement Test.

CONCLUSIONS

Although for most of the analyses performed there were no significant differences between the Experience Approach and the Traditional Method groups, significant differences were observed for fifteen of the comparisons, as shown in Figure V. It would appear that for these particular first grade pupils, subjected to two different instructional methods in the language arts, the prescribed methods produced differential effects in only about one-fourth of the comparisons. This may have been due to the experimental period being too brief for certain effects to occur. Differences may have occurred in behaviors or attributes not measured in this research. And, since many comparisons were made on very small subgroups, it is entirely possible that the Beta error obscured some real differences.

Among the differences observed it may be stated with confidence ($F > .01$) that the Traditional Method appeared more effective for developing the skill of deriving meaning from the written paragraph for males of all socio-economic levels and for middle class females, for developing the listening ability of lower class females, and for developing speaking competence of both males and females in all three socio-economic levels.

The Experience Approach apparently does something to increase interest in reading in lower class males. This method also favorably affects both males and females in writing as these subgroups excelled in the total number of words written. The ratio of the number of different words to the total number of words spoken, which might be thought of as an efficient employment of available vocabulary, was also enhanced by the Experience Approach. A somewhat curious finding is the superiority of upper class females in arithmetic when instructed by the Experience Approach.

DISCUSSION

What practical significance, if any, may be derived from these rather meager findings? Substantial behavioral changes are not readily obtained from short-term efforts in large groups; thus, it is not surprising to find that these groups were more alike than different in spite of exposure to different teaching methodologies. Moreover, even with careful and regular in-service training, individual teacher variation cannot be removed, even if this were a desirable goal. It may be surmised that the observed changes shown in the comparisons and attributed to the respective methodologies may actually have accrued as a result of uncountable pupil-teacher and pupil-pupil interactions never completely analyzed or understood.

Most obvious of the conclusions is that the Traditional Method produced some kinds of effects while the Experience Approach produced some other effects, suggesting that those elements in the learning circumstances which produced the desirable effects might be identified and combined into a new and more effective instructional system. Such refinement would also lend flexibility to curriculum construction and perhaps offer specific suggestions for particular teaching tasks. For example, if the instructional elements which produced superior learning in Paragraph Meaning could be isolated, boys might be grouped for such instruction without respect to socio-economic class. Or, should the task be one of implementing special learning opportunities for underprivileged groups, those instructional elements which appeared to have specificity for lower socio-economic groups could be brought to bear in this program.

TABLE 1

GILMORE, FRY, GATES, KARLSEN TESTS

(a) Control Variables	Experience Approach Instructional Group N = 49		Traditional Method Instructional Group N = 51	
	Mean*	S.D.*	Mean*	S.D.*
Chronological Age	76.98	4.51	76.53	4.83
Pintner-Cunningham Raw Score	42.33	10.46	38.20	8.11
Thurstone—Pattern Copying	19.18	7.46	18.98	7.56
Thurstone—Identical Forms	17.86	10.35	19.33	11.83
Metropolitan Total Score	59.00	14.37	58.78	11.96
Socio-Economic Class	10.37	4.21	7.43	4.15

(b) Experimental Variables	Mean*	Mean*	S.D.*	F
Gilmore—Accuracy	1.75	1.40	0.90	NS
Gilmore—Rate	34.11	35.03	16.86	NS
Fry	4.89	4.65	5.77	NS
Gates	10.69	10.15	5.25	NS
Karlsen	8.53	8.06	7.17	NS

*Adjusted

F: NS

TABLE 2

SPEAKING

(a) Control Variables	Experience Approach Instructional Group N = 299		Traditional Method Instructional Group N = 310	
	Mean*	S.D.*	Mean*	S.D.*
Chronological Age	76.30	4.49	76.19	4.02
Pintner-Cunningham Raw Score	39.42	7.74	38.49	8.93
Thurstone—Pattern Copying	17.62	7.29	19.32	7.55
Thurstone—Identical Forms	14.73	7.89	16.43	7.60
Metropolitan Total Score	56.03	14.43	57.40	15.54
Socio-Economic Class	9.00	4.62	9.17	4.98

(b) Experimental Variables	Mean*	Mean*	S.D.*	F
Speaking Number of Different Words	72.85	78.66	19.66	.01
Speaking Total Number of Words	161.91	204.78	75.91	.01
Speaking—Ratio	.49	.41	.11	.01
Speaking—Mean Sentence Length	11.28	13.40	5.42	.01
Speaking—Mean Sentence Length (5 longest sentences)	18.30	20.36	7.92	.01
Speaking—Sentence Complexity	14.20	17.91	6.11	.01

*Adjusted

$F > F_{.01}$

TABLE 3

WRITING - MALES

(a) Control Variables	Experience Approach Instructional Group N = 86		Traditional Method Instructional Group N = 90		
	Mean*	S.D.*	Mean*	S.D.*	
Chronological Age	75.31	4.30	76.89	4.63	
Pintner-Cunningham Raw Score	40.65	6.76	38.60	9.35	
Thurstone—Pattern Copying	18.66	7.53	19.49	7.67	
Thurstone—Identical Forms	14.86	7.15	19.26	13.06	
Metropolitan Total Score	58.35	12.82	60.19	15.96	
Socio-Economic Class	10.48	5.37	9.58	5.88	
(b) Experimental Variables	Mean*		Mean*	S.D.*	F
Writing—Number of Different Words	15.27		12.51	7.73	NS
Writing—Total Number of Words	21.67		15.76	10.20	.01
Writing—Mean Sentence Length	11.87		12.28	7.36	NS
Writing—Complexity	8.27		9.22	14.11	NS
Writing—Spelling	90.44		93.20	13.91	NS

*Adjusted

F: NS
F > F.01

TABLE 4

WRITING - FEMALES

(a) Control Variables	Experience Approach Instructional Group N = 77		Traditional Method Instructional Group N = 86	
	Mean*	S.D.*	Mean*	S.D.*
Chronological Age	76.56	4.61	75.59	6.99
Pintner-Cunningham Raw Score	40.82	7.21	40.01	8.51
Thurstone—Pattern Copying	17.81	6.45	19.01	7.30
Thurstone—Identical Forms	17.64	6.94	20.50	12.82
Metropolitan Total Score	57.26	15.18	60.38	15.11
Socio-Economic Class	10.79	4.73	9.33	5.85

(b) Experimental Variables	Mean*	Mean*	S.D.*	F
Writing—Number of Different Words	16.51	15.25	9.32	NS
Writing—Total Number of Words	24.81	18.95	10.97	.01
Writing—Mean Sentence Length	12.49	10.79	5.12	NS
Writing—Complexity	7.53	6.18	8.87	NS
Writing—Spelling	92.76	94.10	10.30	NS

*Adjusted

F: NS
F >F.01

TABLE 5

LOWER SOCIO-ECONOMIC CLASS - MALES

(a) Control Variables	Experience Approach Instructional Group N = 85		Traditional Method Instructional Group N = 129	
	Mean*	S. D. *	Mean*	S. D. *
Chronological Age	76. 45	5. 24	77. 50	5. 50
Pintner-Cunningham Raw Score	35. 68	11. 17	31. 80	10. 49
Thurstone—Pattern Copying	14. 32	7. 51	15. 64	7. 95
Thurstone—Identical Forms	12. 66	8. 35	13. 85	9. 31
Metropolitan Total Score	50. 36	14. 03	48. 09	16. 23
Socio-Economic Class	3. 36	1. 61	3. 16	1. 83

(b) Experimental Variables	Mean*	Mean*	S. D. *	F
San Diego Pupil Attitude Inventory	15. 45	16. 14	4. 76	NS
Stanford—Word Reading	14. 77	15. 75	5. 33	NS
Stanford—Paragraph Meaning	10. 98	15. 05	7. 55	. 01
Stanford—Vocabulary	18. 67	17. 96	5. 16	NS
Stanford—Spelling	6. 54	7. 22	4. 92	NS
Stanford—Word Study	28. 37	29. 23	7. 04	NS
Stanford—Arithmetic	32. 64	30. 73	9. 50	NS
Interest in Reading	. 09	. 06	. 06	. 01
Listening	14. 56	13. 98	3. 90	NS

*Adjusted

F: NS
F >F.01

TABLE 6

MIDDLE SOCIO-ECONOMIC CLASS - MALES

(a) Control Variables	Experience Approach Instructional Group N = 175		Traditional Method Instructional Group N = 153	
	Mean*	S.D.*	Mean*	S.D.*
Chronological Age	75.99	4.26	76.48	4.47
Pintner-Cunningham Raw Score	39.76	7.57	38.29	8.90
Thurstone—Pattern Copying	18.47	6.64	19.24	7.54
Thurstone—Identical Forms	15.09	9.65	16.27	7.80
Metropolitan Total Score	56.08	13.88	58.56	15.87
Socio-Economic Class	8.78	1.65	8.56	1.65

(b) Experimental Variables	Mean*	Mean*	S.D.*	F
San Diego Pupil Attitude Inventory	16.94	16.84	4.48	NS
Stanford—Word Reading	19.14	18.74	5.93	NS
Stanford—Paragraph Meaning	15.76	18.27	7.71	.01
Stanford—Vocabulary	22.47	22.13	5.04	NS
Stanford—Spelling	9.86	9.82	5.36	NS
Stanford—Word Study	33.49	35.53	7.57	NS
Stanford—Arithmetic	40.01	38.26	9.53	NS
Interest in Reading	.07	.08	.06	NS
Listening	16.59	16.72	3.16	NS

*Adjusted

F: NS
F > F.01

TABLE 7

UPPER SOCIO-ECONOMIC CLASS - MALES

(a) Control Variables	Experience Approach Instructional Group N = 77		Traditional Method Instructional Group N = 74	
	Mean*	S. D. *	Mean*	S. D. *
Chronological Age	76. 29	3. 69	76. 35	4. 00
Pintner-Cunningham Raw Score	41. 51	6. 19	41. 01	7. 22
Thurstone—Pattern Copying	19. 84	7. 23	21. 41	7. 58
Thurstone—Identical Forms	15. 08	6. 88	20. 97	13. 36
Metropolitan Total Score	60. 47	13. 05	63. 76	13. 08
Socio-Economic Class	15. 55	2. 63	16. 00	3. 05

(b) Experimental Variables	Mean*	Mean*	S. D. *	F
San Diego Pupil Attitude Inventory	16. 94	16. 95	4. 66	NS
Stanford—Word Reading	19. 99	21. 35	5. 98	NS
Stanford—Paragraph Meaning	17. 05	21. 58	8. 34	. 01
Stanford—Vocabulary	23. 27	25. 38	5. 20	NS
Stanford—Spelling	10. 45	10. 45	5. 40	NS
Stanford—Word Study	34. 85	37. 57	8. 20	NS
Stanford—Arithmetic	42. 92	42. 68	8. 83	NS
Interest in Reading	. 08	. 08	. 07	NS
Listening	16. 32	17. 88	3. 52	NS

*Adjusted

F: NS
F >F.01

TABLE 8

LOWER SOCIO-ECONOMIC CLASS - FEMALES

(a) Control Variables	Experience Approach Instructional Group N = 72		Traditional Method Instructional Group N = 85	
	Mean*	S.D.*	Mean*	S.D.*
Chronological Age	77.35	5.02	76.81	4.99
Pintner-Cunningham Raw Score	37.85	7.91	33.94	9.80
Thurstone—Pattern Copying	16.08	8.19	16.99	7.63
Thurstone—Identical Forms	15.88	8.26	16.54	11.11
Metropolitan Total Score	51.47	14.59	50.09	17.15
Socio-Economic Class	3.39	1.65	3.27	1.78

(b) Experimental Variables	Mean*	Mean*	S.D.*	F
San Diego Pupil Attitude Inventory	17.69	17.88	3.55	NS
Stanford—Word Reading	18.03	17.37	5.37	NS
Stanford—Paragraph Meaning	15.81	17.93	7.01	NS
Stanford—Vocabulary	20.07	19.29	5.01	NS
Stanford—Spelling	9.72	7.84	5.01	NS
Stanford—Word Study	33.62	31.27	7.64	NS
Stanford—Arithmetic	36.35	33.86	10.17	NS
Interest in Reading	.07	.07	.06	NS
Listening	14.12	15.66	3.57	.01

*Adjusted

F: NS
F >F.01

TABLE 9

MIDDLE SOCIO-ECONOMIC CLASS - FEMALES

(a) Control Variables	Experience Approach Instructional Group N = 145		Traditional Method Instructional Group N = 149	
	Mean*	S. D. *	Mean*	S. D. *
Chronological Age	76. 18	4. 45	75. 62	5. 69
Pintner-Cunningham Raw Score	37. 98	8. 51	40. 22	7. 06
Thurstone—Pattern Copying	17. 18	6. 81	19. 47	6. 46
Thurstone—Identical Forms	16. 83	10. 41	20. 04	11. 12
Metropolitan Total Score	55. 52	14. 64	60. 75	13. 66
Socio-Economic Class	8. 70	1. 68	8. 48	1. 63

(b) Experimental Variables	Mean*	Mean*	S. D. *	F
San Diego Pupil Attitude Inventory	18. 32	18. 38	4. 56	NS
Stanford—Word Reading	20. 56	20. 24	4. 97	NS
Stanford—Paragraph Meaning	17. 85	21. 16	7. 85	. 01
Stanford—Vocabulary	22. 08	21. 57	5. 08	NS
Stanford—Spelling	11. 13	11. 31	5. 06	NS
Stanford—Word Study	35. 38	36. 06	7. 61	NS
Stanford—Arithmetic	39. 27	37. 63	9. 04	NS
Interest in Reading	. 09	. 09	. 06	NS
Listening	16. 02	16. 89	3. 30	NS

*Adjusted

F: NS
F > $F_{.01}$

TABLE 10

UPPER SOCIO-ECONOMIC CLASS - FEMALES

(a) Control Variables	Experience Approach Instructional Group N = 91		Traditional Method Instructional Group N = 67	
	Mean*	S.D.*	Mean*	S.D.*
Chronological Age	76.57	4.81	76.36	4.65
Pintner-Cunningham Raw Score	42.85	6.76	41.63	6.20
Thurstone—Pattern Copying	18.59	7.11	20.10	6.49
Thurstone—Identical Forms	19.07	9.31	18.72	7.34
Metropolitan Total Score	59.54	14.41	63.63	13.30
Socio-Economic Class	15.51	2.64	15.61	3.28

(b) Experimental Variables	Mean*	Mean*	S.D.*	F
San Diego Pupil Attitude Inventory	17.87	18.72	4.07	NS
Stanford—Word Reading	21.07	20.93	5.36	NS
Stanford—Paragraph Meaning	19.75	22.66	7.86	NS
Stanford—Vocabulary	23.27	24.29	5.09	NS
Stanford—Spelling	11.60	11.68	4.65	NS
Stanford—Word Study	36.95	37.03	7.36	NS
Stanford—Arithmetic	42.14	37.56	8.70	.01
Interest in Reading	.08	.10	.07	NS
Listening	17.43	17.80	3.21	NS

*Adjusted

F: NS
F >F.o:

APPENDIX A

MEASURES OF PROFICIENCY

MEASURES OF SPEAKING PROFICIENCY

The development of various attributes of children's oral language has been studied quite extensively. The analysis of very large samplings of young children's speech is not common, however, because of the tedious and time-consuming nature of the sampling task. Previous studies have usually taken fairly long samples of individual children's speech. Oral responses have been evoked in several ways; for example, in conversation with peers or adults, in children's verbal descriptions of pictures or objects, or in some enumeration task of a structured nature. In the present research it was decided to study the speech of as many of the children participating as possible without incurring the time delay and expense of analyzing hour-long samples or attempting to collect forty or fifty responses per child as other investigators have done. It was necessary, therefore, to determine whether a continuous two-minute sample of children's conversation with an adult would provide an adequate sample for the chosen analyses.

For this project, the following analyses were made of the speech of approximately half of the total pupil population: number of different words, total number of words, ratio of different words to total number of words, mean sentence length, mean length of the five longest sentences, and a sentence complexity score derived in the manner described by Templin[17].

The children's speech was recorded on tape, from which typed scripts were made. The typists were instructed to ignore punctuation, that is, to make no attempt to determine where a "sentence" began or ended, and to attempt to represent the language of the child leaving spaces to indicate pauses. Four selected college students were trained in analysis procedures. Following the rules laid down by previous investigators (see Appendix B), each analyst made independent judgments of the variables to be measured. To determine the consistency of the four raters, partial reliability studies were made of 26 subjects chosen randomly from the initial measurement period. High levels of agreement were obtained for this small sample: perfect agreement for the measure of sentence complexity and for mean length of the five longest sentences. For mean sentence length only one rater deviated from the other raters, and this by but one word. Agreement on the number of different words was nearly as high. The greatest deviation occurred for total number of words, where the range of obtained means was five words. Two analysts were in perfect agreement on this measure.

It appeared that very satisfactory reliabilities could be achieved for the analysis of children's recorded speech for the attributes cited using college students who have received some task training.

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[17] Templin, Mildred C. Certain Language Skills in Children. The University of Minnesota Press, 1957.

MEASURES OF WRITING PROFICIENCY

A sample of each pupil's writing was collected monthly throughout the school year. Initially, both treatment groups used an unfinished sentence to stimulate written expression. As the year progressed, story topics were used as a stimulus.

For this research, the following analyses were made of approximately one-third of the total population: number of different words, total number of words, mean sentence length, spelling, and a sentence complexity score derived in the manner described by Templin[18].

Selected college students were trained and practice sessions were provided, as before. A random sample of raters' judgments was drawn and checked for accuracy by the project staff. Thereafter the raters proceeded with their analysis of the variables to be measured.

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[18] Ibid.

MEASURE OF LISTENING PROFICIENCY

Since a test of listening competence or proficiency was not available for use with beginning first grade children, it was necessary to improvise an instrument. On the assumption that gradations of difficulty would be comparable for visual and for auditory decoding, items from outdated reading achievement materials were ranked in increasing order of length. Since most items provided for four choices, two presumably equal instruments were created by placing the odd numbered choices in one instrument and the even numbered choices in the other. This procedure provided two forms of equal length.

To test for equivalence one form was administered to 49 presecond graders and the other form to 73 presecond graders (Mean C. A. was 7. 1 years). The resulting arithmetic means were respectively 17. 95 with a S. D. of 1. 8, and 17. 86 with a S. D. of 1. 8. These raw scores represented a mean success level (proportion correct) of about 58 percent. Fisher's t was, of course, not significant since the means were nearly identical. The alternate forms were also administered to two groups of 30 prefirst graders (Mean C. A. was 6. 01 years). The resulting arithmetic means were respectively 10. 13 with a S. D. of 1. 0, and 12. 93 with a S. D. of 1. 3; the t-ratio again was not significant. The alternate forms were thus adjudged to be essentially equivalent. The mean percent correct for prefirst grade pupils was about 37. The range appeared adequate for lowest and highest performers.

Since the test as first devised required too long to administer, especially to the younger children, items were systematically removed on the basis of item weights to create two equivalent forms in shorter versions. The project version of the "Listening Test" allowed for 25 responses on one form and 24 responses on the other. Total administration time was estimated to be 30 minutes. The pupil's score was the number of correct responses.

When the performance of prefirst grade pupils was compared to the performance of presecond grade pupils combining forms, a mean of 11. 53 was derived for 60 prefirst graders and a mean of 17. 89 for 122 presecond graders. The t-ratio of 3. 51 significant beyond the . 01 level indicates clearly that this crude instrument easily discriminates these two levels.

Although there is clearly face validity in this type of test, it is equally obvious that "listening" cannot be separated from the other variables in the task, such as span of attention and interest and cognitive factors—particularly level of vocabulary comprehension, which might well be controlled by administering a picture vocabulary test. The ability of the measure to reflect growth implies an element of construct validity.

It has been demonstrated that the two alternate forms may be used interchangeably with confidence.

APPENDIX B

INSTRUMENTS USED IN THE STUDY

APPENDIX III. RULES FOLLOWED FOR CLASSIFICATION OF WORDS AND SENTENCES

A. RULES FOR COUNTING NUMBER OF WORDS*

1. Contractions of subject and predicate like "it's" and "we're" are counted as two words.
2. Contractions of the verb and the negative such as "can't" are counted as one word.
3. Each part of a verbal combination is counted as a separate word: thus "have been playing" is counted as three words.
4. Hyphenated and compound nouns are one word.
5. Expressions which function as a unit in the child's understanding were counted as one word. Thus "oh boy," "all right," etc. were counted as one word, while "Christmas tree" was counted as two words.

B. CLASSIFICATION OF SENTENCE STRUCTURE FROM DAVIS (5:82) AFTER McCARTHY

I. Complete sentences.
   - A. Functionally complete but structurally incomplete. This includes naming; answers in which omitted words are implied because they were expressed in the question; expletives; and other remarks, incomplete in themselves, which are clearly a continuation of the preceding remark.
   - B. Simple sentence without phrase.
   - C. Simple sentence containing (1) phrase used as adjective or adverb in apposition, (2) compound subject or predicate, (3) compound predicate.
   - D. Complex sentence (one main clause, one subordinate clause) with (1) noun clause used (a) as subject, (b) as object, (c) in apposition, (d) as predicate nominative, (e) as objective complement; (2) adjective clause (a) restrictive, (b) nonrestrictive; (3) adverbial clauses of (a) time, (b) place, (c) manner, (d) comparison, (e) condition, (f) concession, (g) cause, (h) purpose, (i) result; (4) infinitive.
   - E. Compound sentence (two independent clauses).
   - F. Elaborated sentence; (1) simple sentence with two or more phrases, or compound subject, or predicate and phrase; (2) complex sentence with more than one subordinate clause, or with a phrase or phrases; (3) compond sentence with more than two independent clauses, or with a subordinate clause or phrases.

II. Incomplete sentences.
   - A. Fragmentary or incomprehensible. Example: "Well – not this, but –."
   - B. (1) Verb omitted completely, (2) auxiliary omitted, verb or participle expressed, (3) verb or participle omitted, auxiliary expressed.
   - C. Subject omitted, either from main or subordinate clause.
   - D. Introducutory "there" omitted.
   - E. Pronoun other than subject of verb omitted.
   - F. Preposition (usually needed sign of infinitive) omitted.
   - G. Verb and subject omitted.
   - H. Main clause incomplete, subordinate clause or second clause of compound sentence complete.
   - I. Main clause complete, subordinate or second clause incomplete. Example: "I know why."
   - J. Omissions from both main and subordinate clauses.
   - K. Essential words present, but sentence loosely constructed because of (1) omission of conjunction, (2) insertion of parenthetical clause, (3) changes in form halfway in sentence. Example: "We have – my brother has a motorcycle."
   - L. (1) Definite, (2) indefinite article omitted.
   - M. Object omitted from either main clause or prepositional phrase.
   - N. Sentence left dangling.

*Adapted by Davis (5:44) from McCarthy (27:36).

TEACHER INVENTORY OF APPROACHES

TO THE TEACHING OF READING

Prepared by
Reading Study Project Committee
Department of Education
San Diego County

Name _____ Approach _____

Grade _____ School District _____

Instructions: Here are 33 statements regarding the teaching of reading as different teachers would approach it. These statements should be read carefully and then judged in terms of their accuracy for describing your approach to the teaching of reading. Your judgment will be indicated by using the following key:

Place a "5" beside the item if it is entirely accurate.
Place a "4" beside the item if it tends to be accurate.
Place a "3" beside the item if it is neither accurate nor inaccurate.
Place a "2" beside the item if it tends to be inaccurate.
Place a "1" beside the item if it is entirely inaccurate.

Please read all 33 items at least once before you attempt to make final judgments.

_____ 1. I provide a systematic program of instruction in reading for my class primarily through the use of a single main source of printed materials.

_____ 2. In my class, attention is given equally to reading skills, interests, and attitudes.

_____ 3. The basic purpose of reading instruction in my class is to extend use of all of the language arts by using each child's thoughts, ideas, and experiences in language activities.

_____ 4. My classroom is organized so far as reading instruction is concerned for the production, sharing and reading of graphic and written materials based upon the child's own thoughts, concerns, and ideas.

_____ 5. I do most of my direct teaching of reading as pupils discuss with me and their group the story or selection to be read, and as they participate in reading group activities.

_____ 6. In my class, the individual pupil receives most of my direct instruction in reading during individual conferences. This direct instruction is based upon the reading selections he has read or is reading on his own.

_____ 7. In my class, reading skill development follows naturally from each child's oral and written expression and is therefore dependent upon each child's unique language development rather than upon a pre-determined sequence.

_____ 8. In my class, I utilize materials which are in the pupil's language based upon his thoughts and experiences. This material serves as a major source of reading material for himself and other pupils. This serves as a primary means for providing for individual differences in my class.

_____ 9. In my class, I feel that the best motivation for reading is stimulated through provision of a wide variety of reading materials which meet the interests and maturational needs of the pupils.

_____ 10. I introduce words (new reading vocabulary) to the children as they find a need to use them in their writing and reading of material. Dictionaries, word lists, and other sources of new words are available and the children are encouraged to use them as needs arise.

_____ 11. The reading activities of the pupils in my class are based primarily upon many other language experiences, especially oral and written language of the individual pupils.

_____ 12. In my class, children are motivated to read by being helped by me to see the relation of the story or selection to be read to their experiences, and by being helped to acquire the vocabulary and skills necessary for success in each new reading task.

_____ 13. I try to provide for individual differences in my class by providing and encouraging the use of a wide range and variety of printed materials. I provide for individual conferences with each pupil in which we discuss his reading problems and his progress. (I am also able to do individual instruction in these conferences.) Group conferences are used for the same purposes when this is appropriate.

_____ 14. In my class, provision for individual differences is made mainly through the use of flexible ability groups. This allows me to give attention to the common problems of each of the groups. I can also give attention to individual student's problems as a part of the group instruction.

_____ 15. In my class, free reading of library table materials is allowed while other pupils are being instructed in reading groups, or on special days designated for free reading, or when pupils have finished assigned work, or any combination of these possibilities. Free reading time is included to assist children in strengthening their reading skills and for personal enjoyment.

_____ 16. I try to provide for and encourage many language activities based upon the self-selected reading material read by individual pupils or by several pupils. Handwriting, spelling, written expression and usage are given attention when they apply to the reading selections which have been chosen by individual pupils.

_____ 17. In my class, most reading by children is "free" reading in that the children generally select their own material to read and are encouraged to read this material for purposes apparent to them, one of which is to become a better reader.

_____ 18. I believe that motivation for reading in my class is stimulated through the child's realization that his oral language expression based upon his own experiences and thoughts as well as the ideas and thoughts of others can be written and thus read.

_____ 19. I have a regular reading period set up to take care of direct teaching of reading and other reading activities. Handwriting, spelling, written expression and usage are taught at another time and are given attention during the reading time when they directly apply to the reading lesson situation.

_____ 20. I evaluate pupil progress in my reading program in relation to material he is able to read and his achievement of the skills necessary to read successfully a given level of reading material.

_____ 21. I base my plan for reading instruction upon the oral and written expression and identified needs of the children.

_____ 22. I encourage children to use free reading time to read materials prepared by other pupils, books of special interest to them, and materials which will help them develop ideas for their own written productions.

_____ 23. Skill development is the primary objective of my reading program.

_____ 24. My plan for reading instruction is determined by and follows the reading needs of individual children as they meet reading problems which require my guidance and help.

_____ 25. My classroom is organized to facilitate many and varied activities relating to reading. I set up time for individual pupil-conferences, small group reading situations, and provide for silent reading of self-selected materials for individual students.

_____ 26. I evaluate children's growth in reading in terms of the quality and quantity of materials read, skills acquired as well as interests and attitudes developed.

_____ 27. I group the pupils in my room in terms of reading ability (generally three groups). I try to gear my instruction in reading to the needs of each of the groups.

_____ 28. Reading instruction in my class is designed for the most part to develop the skills and mechanics of the reading process.

_____ 29. I evaluate the reading growth of the pupil in terms of his ability to express himself in oral and written form, in terms of his skill in reading, comprehending and interpreting written material of all types.

_____ 30. I provide for pupil growth in vocabulary through individual pupil-teacher conferences, encouraging pupils to seek assistance from other pupils in the class, silent reading of a variety of printed materials, group conferences, and through encouraging the use of resource materials (dictionaries, word lists, etc.).

_____ 31. I introduce new vocabulary to each reading group prior to their silent reading of a new selection.

_____ 32. I base my direct instruction in reading primarily upon material produced by the children themselves. This direct teaching, depending upon the situation, is done through group activities, total class activities, or through sessions with individual pupils.

_____ 33. The main purpose of reading instruction in my class is to develop wholesome reading interests and attitudes as well as the development of adequate skills through the child's desire to discover, select, and explore a wide variety of reading materials.

SCORING SHEET FOR TEACHER INVENTORY OF APPROACHES TO THE TEACHING OF READING

The scoring sheet consists of three columns. Each of these columns contains an item number which is directed to an element of the reading program.

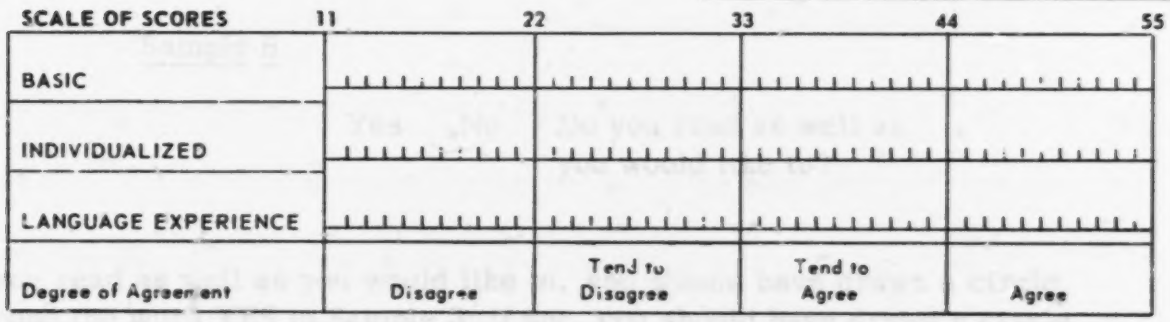
Directions for scoring:

Step 1. The score (1, 2, 3, 4, or 5) which a teacher gives to each item should be recorded in the item space provided on the scoring sheet.

Step 2. Total the numbers recorded in the Basic Approach column, the Individualized Approach column and the Language Experience Approach column.

Step 3. Mark with an X the total score of each approach at the appropriate spot on the profile scale.

Elements of the Reading Program	Basic Item No.	Individualized Item No.	Language Experience Item No.
A. My Purpose for Reading Instruction.	28 ____	33 ____	3 ____
B. The Basis for My Plan of Reading Instruction.	27 ____	24 ____	21 ____
C. How I Motivate for Reading Instruction.	12 ____	9 ____	18 ____
D. Materials of Reading Instruction Which I Use	1 ____	16 ____	11 ____
E. How I Organize My Classroom for Reading . .	19 ____	25 ____	4 ____
F. How I Provide for Direct Reading Instruction.	5 ____	6 ____	32 ____
G. How I Provide for Supplementary Reading . . .	15 ____	17 ____	22 ____
H. How I Include Skill Development in My Reading Program	23 ____	2 ____	7 ____
I. How I Incorporate Vocabulary Development in My Reading Program	31 ____	30 ____	10 ____
J. How I Provide for Individual Differences in My Reading Program.	14 ____	13 ____	8 ____
K. My Criteria Evaluation	20 ____	26 ____	29 ____
	Total ____	Total ____	Total ____



AN INVENTORY OF READING ATTITUDE

(Standardization Edition)

Name _____ Grade _____ Boy Girl
Last First Middle

School _____ Teacher _____

Date of Test _____
Mo. Day Yr.

TO BOYS AND GIRLS:

This sheet has some questions about reading which can be answered YES or NO. Your answers will show what you usually think about reading. After each question is read to you, circle your answer.

INSTRUCTIONS TO PUPILS

Draw a circle around the word YES or NO, whichever shows your answer.

Sample A

Yes No Do you like to read?

If you like to read, you should have drawn a circle around the word YES in Sample A; if you do not like to read, you should have drawn a circle around the word NO.

Sample B

Yes No Do you read as well as you would like to?

If you read as well as you would like to, you should have drawn a circle around the word YES in Sample B; if not, you should have drawn a circle around the word NO.

Yes No 1. Do you like to read before you go to bed?

Yes No 2. Do you think that you are a poor reader?

Yes No 3. Are you interested in what other people read?

Yes No 4. Do you like to read when your mother and dad are reading?

Yes No 5. Is reading your favorite subject at school?

Yes No 6. If you could do anything you wanted to do, would reading be one of the things you would choose to do?

Yes No 7. Do you think that you are a good reader for your age?

Yes No 8. Do you like to read catalogs?

Yes No 9. Do you think that most things are more fun than reading?

Yes No 10. Do you like to read aloud for other children at school?

Yes No 11. Do you think reading recipes is fun?

Yes No 12. Do you like to tell stories?

Yes No 13. Do you like to read the newspaper?

Yes No 14. Do you like to read all kinds of books at school?

Yes No 15. Do you like to answer questions about things you have read?

Yes No 16. Do you think it is a waste of time to make rhymes with words?

Yes No 17. Do you like to talk about books you have read?

Yes No 18. Does reading make you feel good?

Yes No 19. Do you feel that reading time is the best part of the school day?

Yes No 20. Do you find it hard to write about what you have read?

Yes No 21. Would you like to have more books to read?

Yes No 22. Do you like to read hard books?

Yes No 23. Do you think that there are many beautiful words in poems?

Yes No 24. Do you like to act out stories that you have read in books?

Yes No 25. Do you like to take reading tests?

MEASUREMENT OF SOCIO-ECONOMIC CLASS

Socio-economic class was measured with the scale developed by Richard Centers in his study Psychology of Social Classes[1]. This scale assesses three dimensions of socio-economic class: occupation, power, and economic status. The three dimensions have been combined to produce one value describing socio-economic class. (Note: Centers himself relied on occupation alone in many instances.) Scale values for the three dimensions are described in Table 7.

TABLE 7[1]

Scale Values of Categories of the Three Stratification Variables Which Are Combined in a Single Stratification Scale

Scale Value	Occupation	Scale Value	Power Dominance-Subordination	Scale Value	Economic Status
8	Large Business	8	Employer	8	Wealthy
7	Professional	7		7	
6	Small Business	6	Manager	6	Average Plus
5	White Collar Workers	5		5	
4	Farm Owners and Managers	4	Independent	4	Average
3	Skilled Workers and Foremen	3		3	
2	Farm Tenants	2	Tenant	2	Poor Plus
1	Semiskilled Workers	1		1	
0	Unskilled and Farm Labor	0	Employee	0	Poor

[1]Centers, Richard. The Psychology of Social Classes: A Study of Class Consciousness. Russell and Russell, 1961, p. 51. Originally published by Princeton University Press, 1949.

Department of Education, San Diego County
Research Project

SOCIO-ECONOMIC CLASS

The research design for the San Diego County study requires information on the socio-economic class as one of several predictor variables. From the information included in your cumulative record folder, we hope that three major questions can be answered. Using the following scale of value, derive a socio-economic score for each child in your classroom.

Scale of Values

A. Civilian Occupation — Military Occupation

Large business—8 points
Professional—7 points . . . . . Colonel or above
Small business—6 points
White collar—5 points . . . . . Other Commissioned Officers
Farm owner or manager—4 points
Skilled worker or foreman—3 points . . . Ranks above Corporal (Seaman 1st)
Farm tenant—2 points
Semiskilled worker—1 point . . . . . Corporal (Seaman 1st) and below
Unskilled or farm labor—0

B. Power

Employer—8 points . . . . . Colonel or above
Manager—6 points . . . . . Other Commissioned Officers
Independent—4 points . . . . . Ranks above Corporal (Seaman 1st)
Tenant—2 points . . . . . Corporal (Seaman 1st) and below
Employee—0

C. Economic

$20,000 or more—8 points . . . . . Lt. General (Vice-Admiral) or above
9,000-19,000—6 points . . . . . Col. to Major Gen. (Rear Adm.)
5,000- 8,999—4 points . . . . . 2nd Lt. (Ensign) to Lt. Col. (Cdr.)
3,000- 4,999—2 points . . . . . Ranks below 2nd Lt. (Ensign)
Less than 3,000—0

Example:

Name	Occupation	Power	Economic	Total
John Smith	5	4	6	15

John Smith's father sells insurance, owns his own business, makes between $9,000 and $19,000 yearly.

PHONETICALLY REGULAR WORDS ORAL READING TEST

Child's Name _____ Date _____

School _____ Room _____ Code Number _____

Examiner _____ Number of Words Read Correctly _____

1.	nap	16.	walk
2.	pen	17.	haul
3.	hid	18.	jaw
4.	job	19.	soil
5.	rug	20.	joy
6.	shade	21.	frown
7.	drive	22.	trout
8.	joke	23.	term
9.	mule	24.	curl
10.	plain	25.	birch
11.	hay	26.	rare
12.	keen	27.	star
13.	least	28.	porch
14.	loan	29.	smooth
15.	show	30.	shook

Directions: Have pupil read words from one copy while examiner makes another copy. Do not give pupil a second chance but accept immediate self-correction. Let every student try the whole first column. If he gets two words correct from word number six on, let him try the whole second column.

GATES WORD PRONUNCIATION TEST

EXAMINER'S COPY

DIRECTIONS: Have the child read the words out loud. Tell him you would like him to read some words for you. If he fails the first time, ask him to try the word again. Continue until ten consecutive words have been missed. As the words become difficult, special care should be taken to encourage the child. The score is one point for each word correctly pronounced on the first trial, one-half point for each word correctly pronounced on the second trial. (Note: 9½ correct would be scored as 10.)

1. so
2. we
3. as
4. go
5. the
6. not
7. how
8. may
9. king
10. here
11. grow
12. late
13. every
14. about
15. paper
16. blind
17. window
18. family
19. perhaps
20. plaster
21. passenger
22. wander
23. interest
24. chocolate
25. dispute
26. portion
27. conductor
28. brightness
29. intelligent
30. construct
31. position
32. profitable
33. irregular
34. schoolmaster
35. lamentation
36. community
37. satisfactory
38. illustrious
39. superstition
40. affectionate

Child's name: _____ Test date ___ ___ ___

Examiner: _____ Birth date ___ ___ ___

Age: _____

KARLSEN PHONEMIC WORD TEST

EXAMINER'S COPY

DIRECTIONS: 1. Hand the PUPIL'S COPY to the pupil.
2. Say: "Read these words out loud."
3. Note the pupil's errors on *this* sheet.
4. Do not give the pupil a second chance, but accept immediate self-correction.
5. Continue until the child misses 5 consecutive words.
6. The score is the number of words pronounced correctly.

1. fit	14. gold	27. snowball
2. tap	15. freeze	28. thirteen
3. rod	16. chair	29. scare
4. get	17. mouth	30. sunshine
5. would	18. carry	31. gymnasium
6. mother	19. hope	32. join
7. down	20. beat	33. usual
8. age	21. loaf	34. zone
9. think	22. cowboy	35. teaspoon
10. long	23. furniture	36. monument
11. kind	24. page	37. senior
12. yard	25. push	38. flute
13. foot	26. huge	39. behave
		40. faucet

Child's name: _____ Test date ___ ___ ___

Examiner: _____ Birth date ___ ___ ___

Age: _____

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